

ABSTRACT OF THE DISCLOSURE

This invention pertains to certain 4-(1-(sulfonyl)-1H-indol-2-yl)-4-(hydroxy)-cyclohexa-2,5-dienone compounds, and analogs thereof, including compounds of the following formula, which are, *inter alia*, antiproliferative agents, anticancer agents, and/or thioredoxin/thioredoxin reductase inhibitors: formula (I) wherein: Ar is a 1-(sulfonyl)-1H-indol-2-yl group; the bond marked α is independently: (a) a single bond; or: (b) a double bond; the bond marked β is independently: (a) a single bond; or: (b) a double bond; the group $-OR^0$ is independently: (a) $-OH$; (b) an ether group (e.g., $-OMe$); or: (c) an acyloxy (i.e., reverse ester) group (e.g., $-OC(=O)Me$); each of R^2 , R^3 , R^5 , and R^6 , is independently a ring substituent and is: (a) H; (b) a monovalent monodentate substituent; or: (c) a ring substituent which, together with an adjacent ring substituent, and together with the ring atoms to which these ring substituents are attached, form a fused ring; and pharmaceutically acceptable salts, esters, amides, solvates, hydrates, and protected forms thereof. The present invention also pertains to pharmaceutical compositions comprising such compounds, and the use of such compounds and compositions, both *in vitro* and *in vivo*, for example, in the treatment of proliferative conditions, (e.g., cancer), and/or conditions mediated by thioredoxin/thioredoxin reductase.